IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with <u>strikethrough</u>. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1 and 7 and ADD new claims 11-22 in accordance with the following:

1. (CURRENTLY AMENDED) A collaboration apparatus between information processing systems for allowing a plurality of information processing means including information processing means based on different architectures to collaborate with each other, comprising:

collaboration information storage means for storing collaboration information among the plurality of information processing means;

role object generating means for generating role objects respectively corresponding to the information processing means that are allowed to collaborate with each other; <u>and</u>

relating object generating means for referring to the collaboration information of the collaboration information storage means and generating a relating object for collaboration between the role objects.

- 2. (ORIGINAL) A collaboration apparatus between information processing systems according to claim 1, wherein the collaboration information contains timing information on timing of passing of information between the information processing means.
- 3. (ORIGINAL) A collaboration apparatus between information processing systems according to claim 2, wherein the timing information is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.
- 4. (ORIGINAL) A collaboration apparatus between information processing systems for allowing a plurality of information processing means including information processing means based on different architectures to collaborate with each other, comprising:

information identification object generating means for generating an information identification object that determines information to be stored in a storage apparatus of each

information processing means;

collaboration information storage means for storing collaboration information among the plurality of information processing means;

role object generating means for referring to the collaboration information of the collaboration information storage means and generating respective role objects of the information processing means that are allowed to collaborate with each other; and

relating object generating means for referring to the collaboration information of the collaboration information storage means and generating a relating object for transmitting information to be stored in a storage apparatus of each information processing means between the role objects.

- 5. (ORIGINAL) A collaboration apparatus between information processing systems according to claim 4, wherein the collaboration information contains timing information on timing of passing of information between the information processing means.
- 6. (ORIGINAL) A collaboration apparatus between information processing systems according to claim 5, wherein the timing information is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.
- 7. (CURRENTLY AMENDED) An integrated information processing system including a plurality of information processing means, the plurality of information processing means including information processing means based on different architectures, the system comprising:

collaboration information storage means for storing collaboration information among the plurality of information processing means; and

a collaboration apparatus between information processing systems for referring to the collaboration information of the collaboration information storage means and allowing the information processing means to collaborate with each other, the collaboration apparatus between information processing systems including:

role object generating means for generating role objects respectively corresponding to the information processing means that are allowed to collaborate with each other, and

relating object generating means for referring to the collaboration information of

the collaboration information storage means and generating a relating object for collaboration between the role objects.

8. (ORIGINAL) An integrated information processing system including a plurality of information processing means, the plurality of information processing means including information processing means based on different architectures, the system comprising:

information identification object generating means for generating an information identification object that determines information to be stored in a storage apparatus of each information processing means;

collaboration information storage means for storing collaboration information among the plurality of information processing means;

role object generating means for generating respective role objects of the information processing means that are allowed to collaborate with each other; and

relating object generating means for referring to the collaboration information of the collaboration information storage means and generating a relating object for transmitting information to be stored in a storage apparatus of each information processing means between the role objects

9. (ORIGINAL) A computer-readable recording medium storing a collaboration program between information processing systems that allows a computer to execute processing of allowing a plurality of information processing means including information processing means based on different architectures to collaborate with each other, the program allowing a computer to execute:

processing of generating role objects respectively corresponding to the information processing means that are allowed to collaborate with each other; and

processing of referring to collaboration information among the plurality of information processing means and generating a relating object for collaboration between the role objects.

10. (ORIGINAL) A computer-readable recording medium storing a collaboration program between information processing systems that allows a computer to execute processing of allowing a plurality of information processing means including information processing means based on different architectures to collaborate with each other, the program allowing a computer to execute:

processing of generating an information identification object that determines information

to be stored in a storage apparatus of each information processing means;

processing of generating respective role objects of the information processing means that are allowed to collaborate; and

processing of referring to collaboration information among the plurality of information processing means and generating a relating object for transmitting information to be stored in a storage apparatus of each information processing means between the role objects.

11. (NEW) A method of collaborating a plurality of information processors based on different architectures, comprising:

storing collaboration information among the plurality of information processors;

generating role objects respectively corresponding to each of the information processors that are allowed to collaborate with each other; and

referring to the stored collaboration information and generating a relating object for collaboration between the role objects.

- 12. (NEW) The method of collaborating according to claim 11, wherein the collaboration information contains timing information on timing of passing of information between the plurality of information processors.
- 13. (NEW) The method of collaborating according to claim 12, wherein the timing information is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.
- 14. (NEW) A method of collaborating a plurality of information processors based on different architecture, comprising:

generating an information identification object that determines information to be stored in each of the plurality of information processors;

storing collaboration information among the plurality of information processors;

referring to the stored collaboration information and generating respective role objects of the information processor that are allowed to collaborate with each other; and

referring to the stored collaboration information and generating a relating object for transmitting information to be stored in each of the information processors between the role objects.

- 15. (NEW) The method of collaborating according to claim 14, wherein the collaboration information contains timing information on timing of passing of information between the plurality of information processors.
- 16. (NEW) The method of collaborating according to claim 15, wherein the timing information is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.
- 17. (NEW) A computer-readable storage storing a program for controlling a computer to execute collaborating a plurality of information processors based on different architectures, by:

storing collaboration information among the plurality of information processors; generating role objects respectively corresponding to each of the information processors that are allowed to collaborate with each other; and

referring to the stored collaboration information and generating a relating object for collaboration between the role objects.

- 18. (NEW) The computer-readable storage method according to claim 17, wherein the collaboration information contains timing information on timing of passing of information between the plurality of information processors.
- 19. (NEW) The computer-readable storage method according to claim 18, wherein the timing information is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.
- 20. (NEW) A computer-readable storage storing a program for controlling a computer to execute collaborating a plurality of information processors based on different architectures, by:

generating an information identification object that determines information to be stored in each of the plurality of information processors;

storing collaboration information among the plurality of information processors; referring to the stored collaboration information and generating respective role objects of the information processor that are allowed to collaborate with each other; and referring to the stored collaboration information and generating a relating object for

transmitting information to be stored in each of the information processors between the role objects.

- 21. (NEW) The computer-readable storage according to claim 20, wherein the collaboration information contains timing information on timing of passing of information between the plurality of information processors.
- 22. (NEW) The computer-readable storage according to claim 21, wherein the timing information is selected from a plurality of kinds of communication methods including real communication, delayed batch communication, and batch communication.